

*REMARKS/ARGUMENTS*


Applicants thank Examiner Epperson for the courtesies extended to Applicants' representative Rachel J. Mejdrich during the telephone interview of March 3, 2008. During the interview, the chemical structure of Biotin-(AC5)2-Osu (see page 50, line 2, of the specification) was discussed.

The Notice indicates that Biotin-(AC5)2-Osu requires a sequence identifier since the structure allegedly contains a nucleic acid sequence. Applicants note that Biotin-(AC5)2-Osu corresponds to the chemical name 5-[5-(N-succinimidylloxycarbonyl)pentylamido]hexyl D-biotinamide, and contains no amino acids or nucleic acids. In support of this fact, Applicants submit herewith the Material Safety Data Sheet from Dojindo Laboratories (Attachment A).

Accordingly, Applicants request that the Notice be withdrawn since no sequence listing is required.

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

  
\_\_\_\_\_  
John Kilyk, Jr., Reg. No. 30,763  
LEYDIG, VOIT & MAYER, LTD.  
Two Prudential Plaza, Suite 4900  
180 North Stetson Avenue  
Chicago, Illinois 60601-6731  
(312) 616-5600 (telephone)  
(312) 616-5700 (facsimile)

Date: March 4, 2008

**Dojindo Laboratories**

Techno-Research Park, Tabaru 2025-5, Mashiki-machi, Kamimashiki-gun, Kumamoto 861-2202, Japan  
Phone: +81-96-286-1515, Fax: +81-96-286-1525  
Web site: <http://www.dojindo.com/>, E-mail: [info@dojindo.com](mailto:info@dojindo.com)

# Material Safety Data Sheet

**THIS PRODUCT IS A CHEMICAL SUBSTANCE, AND IS INTENDED TO BE USED BY PERSONS HAVING CHEMICAL KNOWLEDGE AND SKILL, AT THEIR OWN DISCRETION AND RISK.**

**IDENTITY:** Biotin-(AC5)2-OSu

**Section 1. Chemical Identification**

Trade Name: Biotin-(AC5)2-OSu  
Manufacturer: Dojindo Laboratories  
Address: Kumamoto Techno Research Park, Tabaru 2025-5 Mashiki-machi, Kamimashiki-gun, Kumamoto 861-2202, JAPAN  
Telephone: +81-96-286-1515  
Data prepared: October 02, 2001

**Section 2. Composition/ Information on Ingredients**

Chemical Name: 5-[5-(N-Succinimidylloxycarbonyl)pentylamido]hexyl D-biotinamide  
CAS Registry #: 89889-52-1

**Section 3. Health Hazard Data**

Route(s) of Entry:

Inhalation? Yes; Skin? Yes; Ingestion? Yes

Health Hazards (Acute and Chronic): May be harmful by inhalation, ingestion or skin absorption.

Causes eye and skin irritation. •• Material is irritating to mucous membranes and upper respiratory tract.

Signs and Symptoms of Exposure: Not available

Medical Conditions Generally Aggravated by Exposure: Not available

**Section 4. First Aid Procedure**

In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes. In case of contact, immediately wash skin with soap and copious amounts of water. Assure adequate flushing of the eyes by separating the eyelids with fingers. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If ingested, wash out mouth with water. Call physician. Discard contaminated clothing and shoes.

**Section 5. Fire and Explosion Hazard Data**

Flash Point (Method Used): Not available

Flammable Limits: Not available

Extinguishing Media: Carbon dioxide, dry chemical powder, foam and water

Special Fire Fighting Procedures: Wear protective clothing, respirator, chemical safety goggles, rubber boots and heavy rubber gloves.

Unusual Fire and Explosion Hazards: Fire may produce irritating or poisonous gases.

**Section 6. Accidental Release Measures**

Steps to be Taken in Case Material is Released or Spilled:

Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Evacuate the area. Sweep up, place in a bag and hold for waste disposal. Ventilate the area and wash the spill site after material pickup is complete. Avoid raising dust.

**Section 7. Handling and Storage**

Wear appropriate NIOSH/ MSHA-approved respirator, chemical-safety goggles, chemical-resistant gloves, other protective clothing. Mechanical exhaust required. Use only in a chemical fume hood. Safety shower and eye bath. Face

## ATTACHMENT A

shield. Do not breathe the dust. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Irritant. Harmful solid. Avoid all contact. Avoid prolonged or repeated exposure.

Other Precautions: Keep tightly closed. Protect from moisture. Store in deep freeze at -20 °C, dark and dry place.

### Section 8. Exposure Controls/ Personal Protection

Respiratory Protection (Specify Type): Necessary

Ventilation, Local Exhaust: Chemical fume hood

Mechanical (General): Necessary

Protective Gloves: Chemical-resistant gloves

Eye Protection: Chemical-safety goggles

Other Protective Clothing or Equipment: Necessary

Work/ Hygienic Practices: Wash thoroughly after handling. Access to safety shower and eye-wash required.  
Do not permit eating, drinking or smoking near the material.

### Section 9. Physical/ Chemical Characteristics

Melting Point: Not available

Boiling Point: Not available

Specific Gravity (water=1): Not available

Vapor Pressure: Not available

Vapor Density (air=1): Not available

Evaporation Rate (butyl acetate=1): Not available

Solubility in DMSO: Soluble

Appearance and Odor: White or slight yellow powder

### Section 10. Reactivity Data

Stability: Stable

Conditions to Avoid: Heat, sunlight and high temperature

Incompatibility (Materials to Avoid): Strong oxidizing agents, strong acids and strong bases.

Hazardous Decomposition or Byproducts: When decomposed, it may emit toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides and sulfur oxides.

Hazardous Polymerization: Will not occur

### Section 11. Toxicological Information

Acute Effects: Data not available

Chronic Effects: Data not available

Carcinogenicity: Data not available

RTECS #: Not listed

### Section 12. Ecological Information

Data not available

### Section 13. Disposal Consideration

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an after burner and scrubber.

### Section 14. Transport Information

Not regulated

### Section 15. Regulatory Information

Not applicable

### Section 16. Other Information

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. DOJINDO LABORATORIES SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE MATERIAL.